

**EGRATION BUS V10.0.0** 



CGI... believes the ISS acts as the glue between all other MES components. Volume 1 – Technical Proposal, File 2 Executive Summary on p1 of 8 © 2016 CGI Technologies and Solutions Inc., All Rights Reserved



IBM® DataPower® Gateway ICAM Service Security: Single multi-channel gateway that helps provide security, control, integration and optimized access to a full range of mobile, web, application programming interface (API), service-oriented architecture (SOA), B2B and cloud workloads. http://www-03.ibm.com/software/products/en/datapower-gateway

bus (ESB) enabling integration of data sources from a wide range of platforms across both service oriented architecture (SOA) and non-SOA

environments. Due to National Institute of Standards and Technology (NIST) identified security vulnerabilities, extra vigilance should be applied

to ensure versions remain properly patched to mitigate known and future vulnerabilities. https://www.va.gov/trm/ToolPage.asp?tid=6372



cloud, on-premise and hybrid applications, and IT infrastructure. Enables monitoring of user experiences with goal of improving the stability of the application infrastructure. www.ibm.com/software/products/en/ibm-application-performance-management **Application Performance Management** 

03.ibm.com/software/products/en/wsrr

IBM® WebSphere® Service Registry and Repository ESB IBM Information Buss (IIB) – SOA Service Registry: Service registry and repository functions for SOA and enterprise apps for SOAP and REST services. Provides: 1) Lifecycle management to track lifecycle, versions and availability of services. 2) Visualization of services and dependencies to help you view and calculate the impact of changes. 3)Integration with other IBM solutions to help optimize services and connectivity. http://www-



IBM Transformation Extender (ITX) Formerly known as IBM WebSphere Transformation Extender. Transforms data in any format (from source app) and routes it (in the appropriate receivers' format) to any number of receiving apps. Automates transformation of data for various apps that work with their own data formats/types. Eliminates need for hand-coding or specialized apps responsible for data transformations between formats. Supported data sources include files, relational

databases, message-oriented middleware, packaged apps, or other external sources. http://<various sources>

sterling

LETE Commerce

ESB IBM Information Buss (IIB) – Guaranteed Delivery: Often referred to as "MQ", is IBM's Messaging solution for Enterprise and IBM's Message Oriented Middleware WebSphere offering. Allows independent and potentially non-concurrent apps on a distributed system to

 $\mathbf{MO}$  securely communicate with each other. https://en.wikipedia.org/wiki/IBM\_WebSphere MQ

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IBM Integration Bus International Business Machine (IBM) Integration Bus, formerly the WebSphere Message Broker, is an enterprise service

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IBM Transformation Extender for Supply Chain EDI

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IBM® Sterling File Gateway (SFG) Consolidates disparate centers of file transfer activity, and facilitates the exchange of file-based information securely, in any format,

protocol, and file size. Transports batch ETL files between ISS modules (local and cloud). Designed to improve operational execution through a centralized and secure

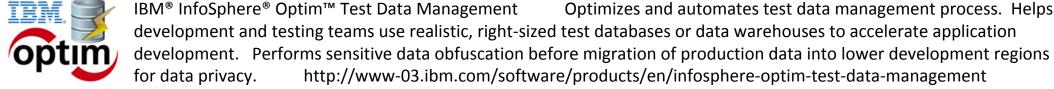
B2B-enabled managed file gateway. http://www.smartclient.com/product/showcase.jsp http://www-03.ibm.com/software/products/en/file-gateway

**IBM Operational Decision Manager** 

IBM® Operational Decision Manager Centralized Configuration – Business Rules Engine: Platform for capturing, automating and governing frequent, epeatable business decisions. Consists of two components, IBM Decision Center and IBM Decision Server, which form the platform for managing and executing business rules and business events to help make decisions faster, improve responsiveness, minimize risks, and seize opportunities.

International Business Machine (IBM) Integration Bus, formerly the WebSphere Message Broker, is an enterprise service

Deloitte HealthInteractive Platform This is the baseline for the MES ISS solution per p1 of 14 > DMAS\_Deloitte\_\_File 3\_1.7.1\_Seven Standards and Conditions.docx https://www2.deloitte.com/us/en/pages/deloitte-analytics/solutions/member-health-with-health-interactive.html

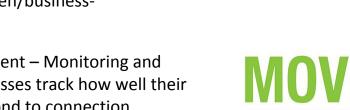


**optim**) development. Performs sensitive data obfuscation before migration of production data into lower development regions http://www-03.ibm.com/software/products/en/infosphere-optim-test-data-management IBM WebSphere MQ ESB IBM Information Buss (IIB) – Guaranteed Delivery: Often referred

to as "MQ", is IBM's Messaging solution for Enterprise and IBM's Message Oriented Middleware **WebSphere** offering. Allows independent and potentially non-concurrent apps on a distributed system to securely communicate with each other. https://en.wikipedia.org/wiki/IBM\_WebSphere\_MQ



IBM® Business Process Manager Centralized Configuration – Business Workflow: Business process management (BPM) platform with tooling and run time for process design and execution, along with capabilities for monitoring and optimizing work that is executed within the platform. Specifically designed to enable process owners and business users to engage directly in the improvement of their business processes. http://www-03.ibm.com/software/products/en/businessprocess-manager-family



App Dynamics Application Performance Management – Monitoring and Auditing: Founded in 2008, AppDynamics "helps businesses track how well their applications and websites are running so they can respond to connection slowdowns or crashes..." (Bloomberg) http://www.forbes.com/sites/ AppDynamics petercohan/2017/01/03/why-you-should-avoid-appdynamicss-ipo/#2800916d497f

enterprise apps for SOAP and REST services. Provides: 1) Lifecycle management to track lifecycle, versions and availability of services. 2) Visualization of services and dependencies to help you view and calculate the impact of changes. 3)Integration with other IBM solutions to help optimize services and connectivity. http://www-03.ibm.com/software/products/en/wsrr

\*Ipswitch's MOVIEit
Shared Services – Secure File Transfers

MOVEit is a managed file transfer software produced by Ipswitch,

Inc. MOVEit encrypts files and uses secure File Transfer Protocols

to transfer data with automation, analytics and failover options.

IBM Transformation Extender

for Supply Chain EDI

IBM® WebSphere® Service Registry and Repository ESB IBM Information Buss (IIB) – SOA Service Registry: Service registry and repository functions for SOA and

https://en.wikipedia.org/wiki/Nagios infrastructure such as servers, switches, apps and services.

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IBM Operational Decision Manager

RSA Identity Governance and Lifecycle Suite

BM® Operational Decision Manager — Centralized Configuration – Business Rules Engine: Platform for capturing, automating and governing frequent, repeatable business decisions. Consists of two components, IBM Decision Center and IBM Decision Server, which form the platform for managing and executing business rules and business events to help make decisions faster, improve responsiveness, minimize risks, and seize opportunities.

Manage, control, and report on users' access to apps and data across your organization and the cloud. Balance business needs for efficient access with

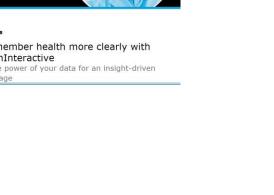


IBM® WebSphere® Application Server Portal and Reports – Portal Server: Provides a range of flexible, secure, Java EE 7 runtime environments available on premise or across any public, private, or hybrid cloud.

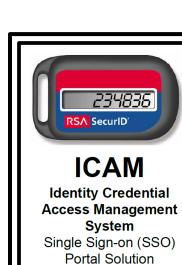


Splunk Monitoring and Auditing – SIEM and Log Aggregation: Splunk produces software for searching, monitoring, and analyzing machine-generated big data, via a web-style interface. It captures, indexes and correlates real-time data in a searchable repository from which it can generate graphs, reports, alerts, dashboards and visualizations. https://en.wikipedia.org/wiki/Splunk













Delivers secure access for any user, from anywhere, to anything. Single sign-on to Web and SaaS applications, native mobile apps, and legacy resources (including VPNs, firewalls, virtual desktops and Windows or Linux servers). Provides the benefit and functionality of RSA Authentication **SecuriD** Manager, the SSO Agent, and Identity Assurance combined into one product. https://community.rsa.com/docs/DOC-54266



security requirements, and empower end users with friendly tools. Use consistent policies and self-service for identity governance and administration. Automated provisioning allows granting or revoking access, helping to ensure access is appropriate and complies with policies. Consisting of multiple customizable software modules that are available on-premise or as a SaaS deployment. https://community.rsa.com/community/products/governance-and-lifecycle/701 https://community.rsa.com/community/products/governance-and-lifecycle https://store.emc.com/us/Product-Family/RSA-Products/RSA-Identity-Governance-and-Lifecycle/p/RSA-Identity-Management-Governance





IBM® Security Privileged Identity Manager Helps mitigate insider threats by centrally managing and auditing the use of privileged access credentials across systems, applications, and platforms. The optional Privileged Session Recorder tool records privileged user endpoint activities for improved visibility and security http://www-03.ibm.com/software/products/en/pim



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IBM® Security Identity Manager Enables effective identity management and governance across the enterprise for improved security and compliance. Automates the creation, modification, recertification and termination of identities throughout the user lifecycle. Simplifies provisioning requests and helps managers make intelligent access decisions for their employees. Also includes enhanced reporting and analytic capabilities to monitor user entitlements and http://www-03.ibm.com/software/products/en/identity-manager



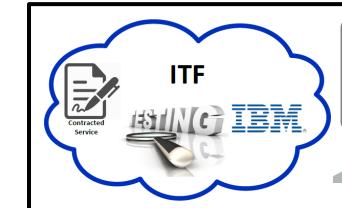
IBM Security Access Manager for Enterprise Single Sign-On ICAM Single Sign-On – Access Management: Combines single sign-on, strong authentication, session management, access workflow automation, and audit tracking. Use to manage business risks, achieve regulatory compliance, decrease IT costs, and increase user efficiency. https://www.ibm.com/support/knowledgecenter/SS9JLE\_8.2.1/ com.ibm.itamesso.doc\_8.2.1/isamesso821\_qsg.html



IBM® Security Guardium Data Encryption Database Security – Provides encryption capabilities to help you safeguard structured and unstructured data and comply with industry and regulatory requirements. Performs encryption and decryption operations with minimal performance impact and requires no changes to databases, applications

Reduced Risk

**Data Encryption** or networks.









Xray for Jira is an add-on for QA Teams with manual and automated test management inside the Jira product. Main benefit is the complete and automatic traceability from Requirement -to-Test -to- Bug. https://marketplace.atlassian.com/plugins/ Xray com.xpandit.plugins.xray/server/overview



Desktop tool for load, stress, and scalability testing of UI Performance – LoadComplete Load Complete websites and web applications using modern web technologies like AJAX, ASP.NET, Java, Flash, Flex and Silverlight. Allows you to generate load from virtual machines, on-premise computers, or websites and web applications using modern web technologies like AJAX, ASP.NET, Java, Flash, https://smartbear.com/product/loadcomplete/overview/ even the cloud.



Server Time Manipulation – Solution-Soft's Time Machine® Provides software virtual clocks to time travel your applications into the future or the past, facilitating time shift testing on your date and time sensitive application logic, such as month end, quarter end, year end processing, billing cycle, work flow, regulatory go live, and policy life cycle. Time Machine eliminates ne need to reset the system clock, which is time consuming, error prone and not possible under Active Directory or in a Kerberos secured environment. http://www.solution-



performance behaviors before releasing to production environments. Shift performance insights more to the left so developers build more reliable code. smartbear.com/product/ready-api/loadui/overview/

LoadUI NG Pro SOA Load Testing – API load tester. Use against a single web

service endpoint or based off of an existing functional API test created in SoapUI NG. Test

the speed and scalability of new changes to your APIs in minutes, not days. Preview API



SoapUI NG Pro SOA Functional Testing – API testing tool For REST, SOAP and other API and IoT protocols, provides comprehensive and functional testing capabilities. Based on open core technology, SoapUI NG Pro helps ensure APIs perform as intended, meet business requirements, and timeframes. https://smartbear.com/product/readyapi/soapui-ng/overview/



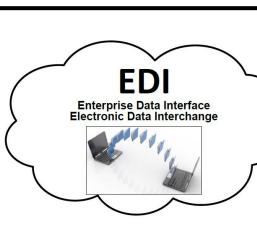
Jira (JEE-rah) is a proprietary issue tracking product, developed by Atlassian. Provides bug tracking, issue tracking, and project management functions. Name is a truncation of Gojira, the Japanese name for Godzilla, itself a reference to Jira's main competitor, Bugzilla. Developed since https://en.wikipedia.org/wiki/Jira (software)

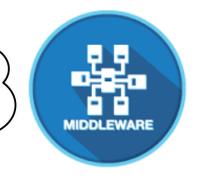


UI Functional Automation – Selenium Selenium is a portable software testing framework for web apps. It provides a record/playback tool for authoring tests, a test domain-specific language (Selenese) to write tests in a number of popular programming languages, including C#, Groovy, Java, Perl, PHP, Python, Ruby and Scala. Tests can then be run against most modern web browsers. It is open-source software. https://en.wikipedia.org/wiki/Selenium\_(software)



Dashboards and Reporting – iDashboards A business intelligence solution to fully utilize information and make highly intelligent business decisions. Uses data visualization technology, providing dashboards that display data via charts and maps and organizes via drill downs. reviews.financesonline.com/p/idashboards/





EDI (aka Electronic Data Interchange) qworks by providing a collection of standard message formats and element dictionary that can be used by businesses to exchange information electronically. EDI is used for electronic commerce. EDI interchanges use some variation of the ANSI X12 standard (USA) or EDIFACT (UN sponsored global standard).

IBM Integration Bus

BM® Integration Bus (IIB) Enterprise service bus (ESB) for systems and apps to communicate with each other. Ability to perform business transaction monitoring (BTM) and a platform for the API economy and analytics. Allows connections to existing systems, to mobile and cloud environments, helping to create a hybrid integration platform. http://www-03.ibm.com/software/products/en/ibm-integration-bus



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